

7/20/90

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PSSSF 1.5 VI

**CHRONOLOGY OF EVENTS
IDAHO RADIONUCLIDE STUDY**

1984

- Sept 25, 1984 Bliss, Director, LVF, submits plan to assess radiological impact of the phosphorus industry in Pocatello and Soda Springs, Idaho, to Guimond, Director, CSD.
- Oct 31, 1984 40 CFR Part 61 Federal Register "Notice of Withdrawal of Proposed Standards, NESHAPs, Radionuclides" states: "EPA and State of Idaho intend to perform a total assessment of the various sources and will investigate ways to reduce or prevent risks from growing."
- Nov 1984 U.S. District Court orders standards to be set.

1985

- Feb 6, 1985 40 CFR Part 61, Federal Register Notice "NESHAPs Final Rule, Standards for Radionuclides" states: "EPA and the State of Idaho will initiate a total assessment of the various sources and will investigate ways to reduce or prevent risks from growing."
- June 28, 1985 Bliss requests meeting of Meyers, Director, ORP, to discuss preliminary plan for Idaho Phosphate Study with Headquarters staff.
- July, 1985 Meeting held in Pocatello with Meyers, Bliss & staff, R10 personnel, representatives from FMC, J.R. Simplot, Monsanto, etc. to discuss purpose of a study.
- Aug 29, 1985 Governor Evans, ID, requests information on the health risks posed by residential exposure to radon; he requests information on planned EPA studies of residential radon; and while he supports EPA's plans to evaluate radionuclide exposure in Southeastern Idaho, he stated his belief those plans should be expanded to examine both radionuclides and radon.
- Sept 13, 1985 Bliss sends Meyers, Director, ORP, and O'Neal, AI DD, R10, copy of draft synopsis of Idaho Phosphat Study.

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Sept 17, 1985 Letter to Governor Evans from R10 RA, Ernesta Barnes, indicates EPA will provide assistance by conducting the Idaho Radionuclide Study. She indicates the study plan would be restricted in scope to immediate areas of Pocatello and Soda Springs, ID.

Sept 23, 1985 Bliss sends draft general plan for Study to Region 10 (O'Neal).

Sept 25, 1985 Study plan is sent to Mel Kollander, Regulatory Reform Staff, HQ, by Bliss for comments.

Sept 26, 1985 Town meetings held in Pocatello and Soda Springs to inform residents of upcoming Study.

Sept 26, 1985 IAG to DOE to fund study at \$200K level sent from Meyers to AA/OAR for signature and processing.

Oct 8, 1985 Bliss advised Meyers IAG was being held up and if work did not begin soon, Study could not begin until April 1986 due to weather.

Oct 31, 1985 Idaho Mining Association advised survey not to begin until Spring 1986 due to funding delays caused by the continuing resolution.

Nov 21, 1985 Kollander calls with "no comments."

Dec 6-9, 1985 Bliss requests meteorological data from J.R. Simplot and Idaho Air Quality Bureau. Slag use and radon level information is requested from the Idaho Department of Health and Welfare.

Dec 6, 1985 Jack Peterson, Idaho Mining Association, updates participants in Study of project plan and status as told to him by John Hall, LVP staff. Hall indicated EPA would share with all parties the actual language of the L.O.E. or work contract.

Dec 18, 1985 Statement of work and work assignment to conduct literature search presented to Region 10's L.O.E. contractor in RTP.

1986

Jan 6, 1986 Bliss presented Plan for Idaho Study at ORP Program Review in HQ.

Jan 7, 1986 Bliss appeals Acting AA's (Elkins) decision to redirect funds for Idaho Study to other projects.

Jan 9, 1986 Region 10 notified of changes in plan per Region's comments. This includes change of name to: Idaho Radionuclide Exposure Study. Study projected to be completed in 22 months.

Jan 9, 1986 Bliss talked to Meyers about funding of Idaho Radionuclide Exposure Study.

Jan 10, 1986 Bliss presents revised resource requirements for AC&C and travel costs to Headquarters.

Feb-Apr, 1986 Other funding mechanisms researched.

May 23, 1986 IAG for \$400K sent to DOE's Pacific Northwest Laboratory (PNL) to perform Study; signed by AA Craig Potter.

June 3-4, 1986 Meetings held with city, county and Indian Tribe officials in the Pocatello and Soda Springs areas to introduce the Study and proposed schedule.

June 13, 1986 IAG signed by DOE.

June 13, 1986 R10 RA sends members of Idaho delegation information on Idaho Radionuclide Exposure Study and informs them survey will begin June 19.

June 19, 1986 Aerial gamma survey commences with Battelle, DOE's PNL contractor, doing work.

Aug 1, 1986 Roles of all participants clearly defined.

Aug 20-21, 1986 Meeting held in SE Idaho with local elected officials and phosphate industry representatives by Battelle staff to discuss the Study Work Plan.

Aug 29, 1986 Battelle PNL presents Work Plan to EPA for Idaho Radionuclide Exposure Study.

Sept 5, 1986 ORP requests EPA's Science Advisory Board's (SAB) Radiation Advisory Committee (RAC) to review the work plan for the Idaho Radionuclide Study.

Oct 2, 1986 SAB reviews and makes comments on Study Work Plan; negative review curtails field activity.

Oct 19, 1986 SAB written comments presented to Agency.

Nov 3, 1986 Bliss transmits plan for completing Study in concurrence with the RAC's comments to Burley.

Nov 4, 1986 Comments on proposed Study received from R10.

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Nov 24, 1986

Bliss transmits redraft of Work Study Plan prepared by Battelle to Burley, Meyers and R10 for comments.

Dec 9, 1986

Bliss sends memo to Meyers in which Study is defined. The objective was revised, per recommendations by SAB, as stated: "The objective of this study is to determine the magnitude and relative importance of various industrial sources of radiation and estimate the doses to the populations of Pocatello and Soda Springs, Idaho."

Dec 10, 1986

Bliss and Hans, LVF, meet in Salt Lake City with Dr. Keith Schlager, RAC consultant designated responsible for coordinating and summarizing RAC Study comments, to discuss comments of RAC.

Dec 17, 1986

SAB meets in Washington and presents critique of the contractor's proposed Study design.

1987

Jan 15, 1987

DOE (Battelle PNL) advises LVF what can be accomplished with remaining funds.

Mar 11, 1987

EPA requests a time extension on IAG.

Mar 26, 1987

ORP Director authorizes field activities to begin after April 1, 1987. Coordination meeting scheduled for March 30-31 to initiate effort.

Mar 30, 1987

ORP Director transmits Revised Study Plan for Idaho Radionuclide Exposure Study to Terry Yosie, Director, SAB, and John Till, Chair, RAC. (The thirteen comments made by the Radiation Advisory Committee (RAC) are addressed.)

Mar 30, 1987

A coordination meeting is held in Las Vegas to discuss start-up of Study field activities; meeting attendees included mining company managers and representatives from ORP, EG&G, and Battelle. Objections by the Idaho Mining Association to withdrawing personal dosimetry and indoor radon measurements from the study were discussed.

Apr 1, 1987

"An Aerial Radiological Survey of Pocatello and Soda Springs, Idaho and Surrounding Area" is published and released.

Apr 13, 1987

Pocatello newspaper reports Study to be resumed.

Apr 17, 1987 LVF advised Battelle alternate method for relating exposure to ground and aerial measurements will be used instead of personal dosimetry. Field measurements scheduled to begin first week of May.

June 12, 1987 SAB's RAC reviews revised Study Plan and gives verbal direction to proceed.

July 10, 1987 Communication Strategy developed by R10, HQ and LVF is finalized.

July 15-24, 1987 PIC measurements by Battelle begin in Idaho communities; EPA personnel assist. Letters and Access Agreement's sent to homeowner's participating in Study.

July 13-14, 1987 Meetings held in Pocatello, ID with public, press, and local government officials. Meetings included a presentation of the results of the aerial survey of the area and a discussion of the upcoming field and residential monitoring.

July 15, 1987 Similar meetings held in Soda Springs, ID. (See above for meeting agenda.)

July 15, 1987 Idaho State Journal reports on Study and meetings held in Pocatello and Soda Springs.

July 20, 1987 SAB sends comments on revised Study Plan to Administrator. The final two comments did not affect the overall plan but included suggestions in the reporting out of findings.

Oct 2, 1987 Region 10 notifies Director, ORP, they have problems with design of the Study and the on-again/off-again nature of the Study. However, they did indicate support of the Study and stated data from it would be useful in making decisions concerning the phosphate industry.

Oct 9, 1987 Administrator Thomas receives comments from SAB.

Oct 26, 1987 ORP Director notifies Bliss of SAB comments; inquires of feasibility of incorporating comments into Study.

Oct 30, 1987 Administrator Thomas sends letter to Chairman, SAB thanking him for RAC comments.

Nov 3, 1987

Administrator receives letter from Idaho Conservation League expressing concern that the Study plan did not include personal exposure monitoring. Copies sent to Idaho congressional delegation.

Dec 17, 1987

Request from Battelle to use ORP equipment to obtain additional gamma emissions data.

Dec 18, 1987

Letter from AA Potter to Idaho Conservation League (Meredith) in response to their November 3 letter indicating the SAB "found the current version of the Study plan to be of sufficient quality and detail to achieve the Study's objective."

Dec 15, 1987

Administrator sends Chairman, SAB, and Acting Chairman, RAC, Agency response to comments and review of Study. No further review indicated.

Dec 30, 1987

Battelle submits a draft of another revised work plan of the Study to LVF for review.

1988

Jan 12-13, 1988

LVF staff meet in Richland, WA, with contractor to review status of project, procedures used, analyses, and public relations.

Feb 8, 1988

Idaho Conservation League writes to AA Potter to inquire about EPA monitoring methods.

March 1988

AA Potter responds to Idaho Conservation League.

Mar 28, 1988

LVF staff met with representatives of the phosphate industry in Las Vegas to discuss progress of Study and present preliminary results of measurements made.

May 9-16, 1988

LVF and EERF staff recalibrate air samplers and dismantle some stations at Pocatello.

May 9, 13, 1988

Idaho State Journal reports specific information relating to the Study, including figures, conclusions and interpretation of levels.

May 15, 1988

Hahn, LVF staff, met with local chapter of American Institute of Mining and Metallurgical Engineers on progress of Study.

Hahn also met with staff from Monsanto in Soda Springs.



June 2, 1988 Mayor Hansen, Soda Springs, writes Bliss in reference to information which was given to citizens and press while Hahn was in Idaho. Copies sent to Idaho Congressional delegation.

June 20, 1988 Sen Symms writes to Bliss re Mayor Hansen's letter.

July 6, 1988 Bliss, Director, LVF, and Mark Maserik, EPA's Idaho Operations Office, attend Soda Springs City Council meeting and report on progress of the radionuclide study.

July 7, 1988 Bliss meets with John Hatch, Senator Symms Pocatello office, and reports the status of the study and results of previous nights meeting.

Sept 20, 1988 Mayor Hansen, Soda Springs, informed EPA to terminate air sampling in Soda Spring area week of Sept 20.

Dec 23, 1988 O'Neal, R10, writes to Guimond, Director, ORP, inviting him and other ORP staff to meet in Seattle to review the findings of the Idaho Radionuclide Study and discuss appropriate next steps. Meeting proposed for March. Following R10 meeting, State and local officials, industry and the public to be briefed in Idaho.

1989

Jan 6, 1989 Battelle presents outline for Final Report and requests that EPA and Battelle roles be defined in the development of the final draft report.

March 1989 Draft Report presented to LVF.

Mar 10, 1989 Bliss transmits briefing information on second version of the draft report to Guimond.

Mar 23, 1989 Meeting on Idaho Radionuclide Study held in Seattle. Attended by Guimond, Bliss, and Dempsey, ORP; Region 10 and State of Idaho personnel.

Apr 6, 1989 Puskin, BAB/ASD, sends comments on Study to LVF.

Apr 7, 1989 Battelle advised LVF their final contribution to Study will be submitted by May 19, 1989.

Apr 14, 1989 Bliss asks Battelle for additional background information relating to Study.

Apr 22, 1989	Draft Preliminary Report is sent to Guimond with revised version of vu-graphs and other briefing information to be used in Washington.
Apr-May 1989	LVF finds most of Report of Study from Battelle needs to be rewritten for clarity; statistics need to be recalculated. LVF staff assigned to rewrite report.
May 5, 1989	Bliss advises Guimond listing of 3 Idaho sites on NPL was not based on levels of radiation.
May 19, 1989	Bliss advises Battelle their work is concluded; no additional funding is available. All information is to be forwarded to ORP/LVF.
May 30, 1989	Revised draft report of Radionuclide Exposure Study sent to Guimond for comment. Copies sent to HQ and R10 staff. Comments requested by June 6.
June 5, 1989	Draft memo to OEER sent to Janes from Bliss recommending that Idaho sites proposed for the NPL also be investigated for radiation relative to listing and ranking. Guimond's concurrence requested.
June 15, 1989	Presentation on findings given to mayors and councilmen of Soda Springs and Pocatello, Bannock and Power County Commissioners and representative from Senator McClure's Pocatello office.
June 16, 1989	Presentation given to Region 10 and industry representatives on Study findings. Media briefing followed meeting. Reported by Stuart Engler, <u>Idaho State Journal</u> .
July 26, 1989	Bliss transmits memo to Dyer, per his request, regarding risk estimates used in Study.
Nov 3, 1989	Final Idaho Radionuclide Study Report sent to HQ and R10 for final review and concurrence.
Dec 6, 1989	Copy of Jack Russell's (ORP/HQ) comments on Report faxed to Dyer at Dyer's request.
1990	
Jan & Feb, 1990	Communication Strategy for release of Report is developed by LVF and R10. Sent to HQ for concurrence.

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Feb 26, 1990 Request for publication approval from Guimond to Brenner, OAR.

Mar 21, 1990 Report released for printing by Ken Feith for Rob Brenner, OAR.

Apr 4, 1990 Report sent to printer.

Apr 19, 1990 Report received from printer.

Apr 23, 1990 Report sent to PHS's Agency for Toxic Substances and Disease Registry (ATSDR) by R10 for review and comment.

Apr 25, 1990 Bliss sends printed Report to Guimond and HQ staff.

Apr 30, 1990 R10 Superfund Branch Chief, Phil Millam assigns Catherine Krueger, R10, as coordinator for release of the Idaho Study and other follow-up actions. R10 staff assigned in areas of: HQ briefings, Risk Communication, Site Assessment, and Enforcement Strategy.

May 18, 1990 ATSDR issues statement on Pocatello and Soda Springs.

May 29, 1990 Technical session held with EPA (R10 and LVF) and State personnel in Boise, ID, on Report.

May 30-31, 1990 Report is formally released to public through meetings held in Pocatello and Soda Springs with city officials, industry representatives and community residents. EPA personnel include Superfund staff from Region 10 who assumed role of announcing findings to public.

July 10, 1990 R10 formally requests of Guimond Review of Action Criteria for homes contaminated with elemental phosphorus slag in Soda Springs, Idaho.

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Idaho Radionuclide Study Office of Radiation Programs

Oct. 31, 1984

40 CFR 61 - NESHAPs withdrawal

Administrator announced intent to do a total assessment

Feb. 6, 1985

40 CFR 61 - NESHAPs standards

Administrator stated EPA will initiate a total assessment

July 1985

EPA met with local industry managers to discuss purpose of study

Sep. 13, 1985

ORP synopsis of study plan to Region 10

Sep. 17, 1985

Regional Administrator indicated to Governor Evans that EPA will assist Idaho by doing study

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Sep. 26, 1985

Town meetings held in Pocatello and Soda Springs

Sep. '85 - June '86

Funding arranged and contractor selected

June 2-9, 1986

Meetings with local civic leaders to introduce study plan and schedule

Mid-June 1986

Aerial Survey initiated (3 weeks)

Sep. 5, 1986

ORP requested SAB Radiation Advisory Committee to review study plan

Oct. 19, 1986

SAB comments to Agency

Jan. 1987

Funding adjusted

Mar. 30, 1987

Revised Study Plan to SAB

Mar. 30, 1987

Industry briefed on study plan

June. 12, 1987

**ORP met with SAB - plan
approved verbally**

July 13-24, 1987

Public meetings held to present aerial survey results and study plan

July 20, 1987

Measurements began in homes

Written approval recieved from SAB with 2 comments

**Dec. 15, 1987
1988**

Final resolution of all comments from SAB

Data collection and analysis

Mar. 28, 1988

Briefed industry representatives in Las Vegas

May 9-16, 1988

Briefed Monsanto and AIME

July 6, 1988

Met with Soda Springs officials and Senator Symms staff

Mar. - May 1989

June 1989

Nov. 3, 1989

Mar. 21, 1990

Apr. 19, 1990

Contractor redrafted report

**Funds exhausted, ORP staff assigned
to finish report**

Report began final review process

Report approved by AA's office

Report printed

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Apr. 23, 1990

Report sent to ATSDR

May. 18, 1990

"ATSDR believes the exposure levels in these cities may pose a distinct public health concern or hazard to the residents."

May 29, 1990

EPA presents results to the Idaho health and environmental officials.

May 30-31, 1990

EPA presents results to industry, local officials, and the public in Pocatello and Soda Springs.

Appendix V

Community Relations Activities

1990

- May 30, 31 - Released the Radionuclide Study first to public officials, then to industry, then to the press. Held briefings on the implications of the study.
- June 6 - Mailed over 1400 fact sheets, questionnaires and an invitation to a public meeting on the risks associated with radioactive slag to the residents of Soda Springs.
- Advertized a public meeting in display newspaper ads, through community service announcements and through flyers in Pocatello.
- June 15 - Over 130 questionnaires received from Soda Springs were reviewed and used to help develop the presentation to the community. Most respondents had specific questions which were incorporated into the EPA presentations at the public meetings.
- June 18 - Community meeting in Soda Springs attended by over 250 people.
- EPA indicated its desire to test homes in Soda Springs for gamma radiation and radon on a voluntary basis.
- Meeting evaluation questionnaire and sign-up sheets resulted in over 50% interest in home testing.
- EPA pledged to hold another public meeting to discuss the home testing plan and possible remediation levels and strategies.
- June 19 - Met with editorial board of Idaho State Journal in Pocatello.
- Over 100 people attended public meeting in Pocatello, including representatives of the media.
- July - Mailing list of ^{almost} ~~over~~ 400 names developed.
- Information Repositories established at libraries in Pocatello, Chubbuck and Soda Springs.
- Phone calls made to individuals indicating high degree of concern on the questionnaire to help gauge the level of anxiety in community.
- On-going responses to requests for information from elected officials.